

**TECHNICAL INFORMATION  
AND  
SERVICE DATA**



**MODEL 524-M**

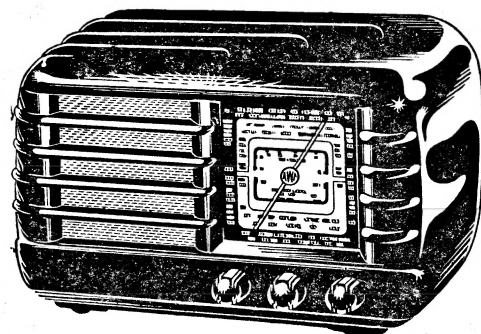
**FIVE VALVE, BROADCAST, A.C. OPERATED.  
SUPERHETERODYNE**

**AND**

**MODEL 525-M**

**FIVE VALVE, TWO BAND, A.C. OPERATED  
SUPERHETERODYNE**

**ISSUED BY  
AMALGAMATED WIRELESS (A/SIA) LTD.**



**ELECTRICAL SPECIFICATIONS.**

FREQUENCY RANGE: Model 524-M ..... 540-1600 Kc/s  
(555-187.5M)

Model 525-M ..... 540-1600 Kc/s  
(555-187.5M)  
6-18 Mc/s  
(50-16M)

INTERMEDIATE FREQUENCY ..... 455 Kc/s

POWER SUPPLY RATING ..... 200-260 volts,  
50-60 C.P.S.

(Models are produced with other voltage and  
frequency ratings.)

POWER CONSUMPTION ..... 60 watts

**VALVE COMPLEMENT**

Model 524-M (1) 6A8G Converter  
(2) 6SK7GT I.F. Amplifier  
(3) 6SQ7GT Det., A.V.C. A.F. Amp.  
(4) 6V6GT/G Output  
(5) 6X5GT Rectifier

Model 525-M (1) 6J8GA Converter  
(2) 6SK7GT I.F. Amplifier  
(3) 6SQ7GT Det., A.V.C. A.F. Amp.  
(4) 6V6GT/G Output  
(5) 6X5GT Rectifier

**LOUDSPEAKER:**

5 inch—Code No. AA16  
Transformer XA2  
V.C. Impedance—3 ohms at 400 C.P.S.  
Field—1000 ohms.

UNDISTORTED POWER OUTPUT: 3 watts

**GENERAL DESCRIPTION.**

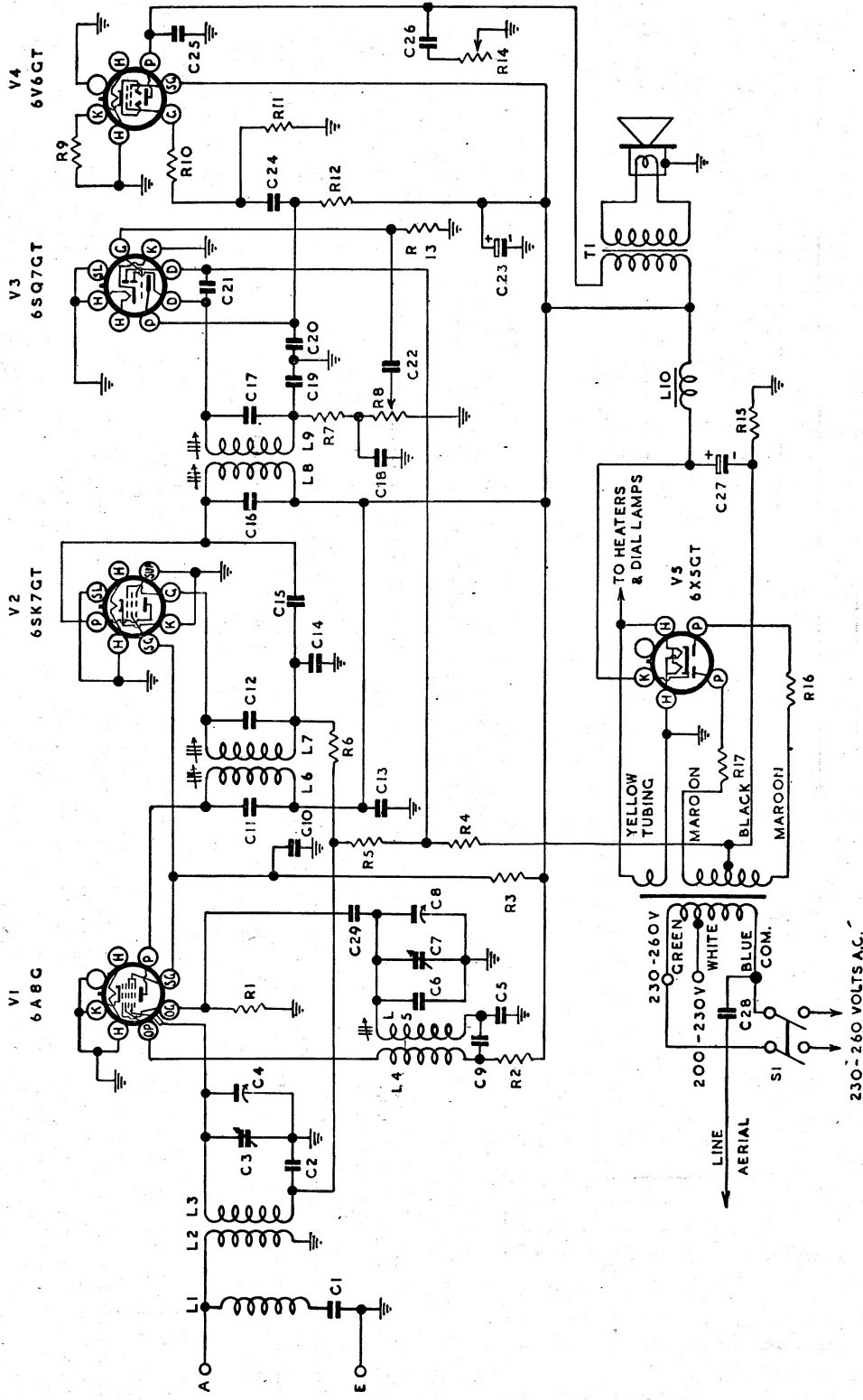
The models 524-M and 525-M are mantel models housed in attractively designed moulded cabinets, which are produced in three colours: Ivory, Walnut and Burgundy.

Features of design include: Tropic-proof construction, automatic volume control, magnetite cores in I.F. transformers and broadcast oscillator coils, air-dielectric trimming capacitors.

Electrically, model 524-M closely resembles the models

512-M/519-M, differences being in the addition of a power switch on the volume control (R8) and a capacity to mains aerial. (See circuit diagram and code.) For all other information, refer to the 512-M/519-M Service Manual.

Model 525-M is the same as model 518-M, except that the power switch is situated on the volume control (R10). Refer to the model 510-M Service Manual for all other information.



## CIRCUIT CODE — RADIOLA 524-M.

Code No.	Description	Part No.	Code No.	Description	Part No.	Code No.	Description	Part No.
L1	I.F. Filter (including C1)	9382	C8	12-430 uF Tuning	18201	C25	.01 uF Paper, 600 v. working	18201
L2, L3	Aerial Coil, 540-1600 Kc/s.	15454	C9	.05 uF Paper, 400 v. working		C26	.03 uF Paper, 600 v. working	
L4, L5	Oscillator Coil, 540-1600 Kc/s	7638A	C10	.01 uF Paper, 400 v. working		C27	8 uF 525 P.V. Electrolytic	
L6, L7	1st I.F. Transformer	22700	C11	70 uF Mica		C28	500X uF Mica (2000 v. test)	
L8, L9	2nd I.F. Transformer	22703	C12	70 uF Mica		C29	70 uF Mica	
L10	Speaker Field, 1000 ohms		C13	0.1 megohm—Tone Control	21917	<b>TRANSFORMERS</b>		
R1	50,000 ohms, 1 watt		C14	.05 uF Paper, 400 v. working		T1	Loudspeaker Transformer	XA2
R2	20,000 ohms, 1 watt		C15	9 uF Mica		T2	Power Transformer 50-60 C.P.S.	17859A
R3	25,000 ohms, 2 watt		C16	70 uF Mica		T2	Power Transformer, 40 C.P.S.	17861A
R4	2.5 megohms, 1 watt		C17	70 uF Mica		<b>SWITCH</b>		
R5	1.6 megohms, 1 watt		C18	100 uF Mica		S1	Power Switch (on R8)	AA16
R6	0.1 megohm, 1 watt		C19	100 uF Mica		<b>LOUDSPEAKER</b>		
R7	50,000 ohms, 1 watt		C20	200 uF Mica		5 inch Electro Magnet		
R8	0.5 megohm—Volume Control (including S1)	23480	C21	50 uF Mica				
			C22	.01 uF Paper, 600 v. working				
			C23	.02 uF Paper, 600 v. working				
			C24	.02 uF Paper, 600 v. working				



## SOCKET VOLTAGES — MODEL 524-M.

Valve	Cathode to Chassis Volts	Screen Grid to Chassis Volts	Anode to Chassis Volts	Anode Current mA	Heater Volts
6A8G Converter .....	0	90	240	5.0	6.3
Oscillator .....	—	—	170	3.5	—
6SK7GT I.F. Amp.	0	90	240	8.0	6.3
6SQ7GT Det., A.V.C. A.F. Amp.	0	—	90*	0.6	6.3
6V6GT/G Output .....	13	240	225	35.0	6.3
6X5GT Rectifier .....	300	—	280 (A.C.)	—	6.3

Total H.T. Current—60 mA.

Volts across back-bias resistor R15—3.0

Measured at 240 volts A.C. supply. No signal input.

Volume/Power Control maximum clockwise. Voltmeter 1000 ohms per volt; measurements taken on highest scale giving accurate readable deflection.

\*This reading may vary depending on the resistance of the voltmeter used.

## SOCKET VOLTAGES — MODEL 525-M.

Valve	Cathode to Chassis Volts	Screen Grid to Chassis Volts	Anode to Chassis Volts	Anode Current mA	Heater Volts
6J8GA Converter M.W. ....	1.5	80	240	1.0	6.3
S.W. ....	2.0	80	240	1.3	—
Oscillator M.W. ....	—	—	115	5.0	—
S.W. ....	—	—	115	5.0	—
6SK7GT I.F. Amp. ....	0	80	240	6.0	6.3
6SQ7GT Det., A.V.C. A.F. Amp.	0	—	90*	0.6	6.3
6V6GT/G Output .....	13	240	225	35.0	6.3
6X5GT Rectifier .....	300	—	280 (A.C.)	—	6.3

Volts across back-bias resistor R16—3.0

Total H.T. Current—60 mA.

Measured at 240 volts A.C. supply. No signal input.

Volume/Power Control maximum clockwise. Voltmeter 1000 ohms per volt; measurements taken on highest scale giving accurate readable deflection.

\*This reading may vary depending on the resistance of the voltmeter used.